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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SYED, NABIL H

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,919	Applicant(s) BLAKER, DAVID A.	
	Examiner NABIL H. SYED	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-12, 15-23, 32 and 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-12, 15-23, 32 and 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a final office action on merits. Amendments received on 5/05/08 have been entered. As per applicant claims 6, 13, 14 and 24-31 are cancelled. Claims 32 and 33 are newly added claims. Accordingly claims 1-5, 7-12, 15-23, 32 and 33 are pending.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 1 recites the limitation "the trainable transceiver" in line 4. There is insufficient antecedent basis for this limitation in the claim. The "trainable transceiver" should be -- the trainable transceiver system --. For the purpose of examination the "trainable transceiver" is -- the trainable transceiver system --.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior

art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5, 7-12, 15-23, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desai (6,377,173) in view of Shannon (US Pub 2002/0113686) and further in view of Dewan (US Pub 2001/0035811).

As of claims 1-5, 7, 8, 10-12, 15-19, 21-23, and 32, Desai discloses a trainable transceiver system (see fig. 1) for providing an activation signal characteristic to a portable transmitter (via a key fob combination 37), the portable transmitter configured to store the activation signal characteristic and to complete a transmission based on the stored activation signal characteristic (via key/fob 37 receiving a wireless signal from the control 22 and storing the code of the garage door and later transmitting the code to activate the garage door; see col. 2, lines 44-64; also see fig. 1), the trainable transceiver system comprising:

a transceiver configured to receive a characteristic of an activation signal from another device (via the control 22 fixed to a vehicle receiving the wireless signal from a control 30 of a garage door and learning the frequency and code from the received signal; see fig. 1; also see col. 2, lines 24-35). Desai further discloses that the control circuit 22 store the characteristic of the activation signal in a memory (via control circuit 22 storing the received frequency and code; see col. 2, lines 33-35). Desai further discloses that the control 22 retransmits the learned code to the key/fob 37 (see fig. 1; also see col. 2, lines 45-46; also see col. 3, lines 35-44). Desai discloses that the code

communicated between the vehicle control 22 and key/fob 37 is encrypted (see col. 3, lines, 20-23). (Note: control 22 receive and transmit signal, hence comprising a transceiver).

Even though Desai disclose that the codes are learned by the vehicle controller and then transmitted to a key/fob (portable transmitter) using a RF it fails to explicitly disclose that the control circuit causes a LED to transmit the stored characteristic of the activation signal.

Shannon discloses a transceiver 10 for transmitting and receiving the signals wherein the wireless communication between the transceiver 10 (portable transmitter) and the device 14 (vehicle controller) is performed optically, since the communication is performed optically the device 14 and transceiver 10 both has the ability of optical transmission and reception (see figs. 1-4; also see paragraph [0034]). Shannon discloses that a transceiver may include an optical or acoustical transducer such as light emitting diode or a speaker for transmitting a short distance wireless signal by optical or acoustical means (see [paragraph 0047], lines 12-16).

From the teaching of Shannon it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the trainable transceiver system of Desai to include an optical receiver in the portable transmitter and a LED to transmit the signal in the control circuit of the vehicle transmitter for the process of optical transmission as taught by Shannon since infra-red signal consumes less power in transmitting the signal and it does not have as many restrictions on the signal

characteristics because it does not fall under the control of the Federal Communications Commission (see paragraph [0005], 17-21).

The combination of Desai and Shannon discloses all the limitation of the claimed invention. However the combination of Desai and Shannon fails to explicitly disclose that the control circuit is configured to light the LED during a training process of the trainable transceiver system to visually communicate information to a user of the system.

Dewan discloses a remote control for multiple vehicle, wherein in a training process of the remote control LED 108 flashes (visual indication) an appropriated signal to confirm that the user has successfully entered learn mode (see paragraph [0023]).

From the teaching of Dewan it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the LED to visually communicate information to a user of the system in order to confirm to the user that a certain action has been completed.

As of claims 9, 20 Shannon discloses that transceiver 10 (portable transmitter) can be trained to learn the signal formats of other remote transmitters (see paragraph [0039]).

As of claim 33, Desai discloses that control 22 further comprises operator input device (via key pad 25) where user enters the code to send a signal to the garage door (see col. 2, lines 35-41).

Response to Arguments

7. Applicant's arguments filed 5/05/08 have been fully considered but they are not persuasive.

As per applicant argument that the combination of Desai and Shannon does not disclose "a light emitting diode configured to transmit the characteristic of the activation signal via an optical transmission to the optical receiver of the portable transmitter." The Examiner respectfully disagrees. As disclosed above even though Desai disclose that the codes are learned by the vehicle controller and then transmitted to a key/fob (portable transmitter) using a RF it fails to explicitly disclose that the control circuit causes a LED to transmit the stored characteristic of the activation signal.

Shannon discloses a transceiver 10 for transmitting and receiving the signals wherein the wireless communication between the transceiver 10 (portable transmitter) and the device 14 (vehicle controller) is performed optically, since the communication is performed optically the device 14 and transceiver 10 both has the ability of optical transmission and reception (see figs. 1-4; also see paragraph [0034]). Shannon discloses that a transceiver may include an optical or acoustical transducer such as light emitting diode or a speaker for transmitting a short distance wireless signal by optical or acoustical means (see [paragraph 0047], lines 12-16).

From the teaching of Shannon it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the trainable transceiver system of Desai to include an optical receiver in the portable transmitter and a LED to transmit the signal in the control circuit of the vehicle transmitter for the process of optical transmission as taught by Shannon since infra-red signal consumes less power

in transmitting the signal and it does not have as many restrictions on the signal characteristics because it does not fall under the control of the Federal Communications Commission (see paragraph [0005], 17-21). Shannon further discloses that the trainable remote controls are common in both the infra-red and the radio frequency medium of communication (see paragraph [0006], lines 41-47). Further using an LED in a remote controller provides an indication to the user that controller has trained or failed to train to a remote control signal and that it is currently transmitting signals.

From the discussion above it can be seen that it would have been obvious to one of ordinary skill in the art at the time the invention was made to change RF communication of Desai and put an optical transmitter in vehicle transceiver and a optical receiver in portable transmitter (like key fob) to use optical transmission and reception. So the Examiner maintains his rejection.

Applicant's arguments with respect to the limitation, "wherein the control circuit is configured to light the LED during a training process of the trainable transceiver system to visually communicate information to a user of the system" have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NABIL H. SYED whose telephone number is (571)270-3028. The examiner can normally be reached on M-F 7:30-5:00 alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on (571)272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2612

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nabil H Syed
Examiner
Art Unit 2612

N.S

/Brian A Zimmerman/
Supervisory Patent Examiner, Art Unit 2612